

ABSTRACT

A method for a mobile station to acquire a IP network address from a gateway in a GPRS system. First the mobile station generates a link identifier. Next the mobile requests a network address by sending a link identifier over a wireless link to a gateway along with a request for the gateway to check to see if the link identifier is unique. Upon receiving the network address request the gateway checks to see if the link identifier is unique. The gateway responses by either confirming that the network link identifier is unique or by sending a different unique link identifier to the mobile station. The gateway also has the ability to respond by sending a network prefix to the mobile station. Upon receiving the network prefix the mobile station combines the network prefix with the interface identifier to generate a IP network address.